

# RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.

Application Serial Number: 10/543,033A  
Source: IFW0  
Date Processed by STIC: 11/13/06

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

DATE: 11/13/2006

PATENT APPLICATION: US/10/543,033A

TIME: 11:01:47

Input Set : F:\Substitute seq listing 10589-012-999.txt

Output Set: N:\CRF4\11132006\J543033A.raw

3 <110> APPLICANT: Cao, Liangxian  
 4 Trifillis, Panayiota  
 6 <120> TITLE OF INVENTION: METHODS FOR IDENTIFYING COMPOUNDS THAT MODULATE UNTRANSLATED  
 7 REGION-DEPENDENT GENE EXPRESSION AND METHODS OF USING SAME  
 9 <130> FILE REFERENCE: 10589-012-999  
 11 <140> CURRENT APPLICATION NUMBER: US 10/543,033A  
 C--> 12 <141> CURRENT FILING DATE: 2005-07-21  
 14 <150> PRIOR APPLICATION NUMBER: PCT/US2004/001643  
 15 <151> PRIOR FILING DATE: 2004-01-21  
 17 <150> PRIOR APPLICATION NUMBER: 60/441,637  
 18 <151> PRIOR FILING DATE: 2003-01-21  
 20 <160> NUMBER OF SEQ ID NOS: 90  
 22 <170> SOFTWARE: PatentIn version 3.2  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 14  
 26 <212> TYPE: DNA  
 27 <213> ORGANISM: Artificial Sequence  
 29 <220> FEATURE:  
 30 <223> OTHER INFORMATION: Description of Artificial Sequence: consensus G-quartet  
 element from  
 31 synthetic sequences  
 34 <220> FEATURE:  
 35 <221> NAME/KEY: misc\_feature  
 36 <222> LOCATION: 3, 7, 8, 11  
 37 <223> OTHER INFORMATION: n = a, t, c, or g  
 39 <220> FEATURE:  
 40 <221> NAME/KEY: misc\_feature  
 41 <222> LOCATION: (7)..(8)  
 42 <223> OTHER INFORMATION: This represents one form of the sequence as described, other  
 forms  
 43 described may have up to five nucleotides in this variable region  
 45 <400> SEQUENCE: 1  
 W--> 46 ggntggnggg ntgg 14  
 49 <210> SEQ ID NO: 2  
 50 <211> LENGTH: 14  
 51 <212> TYPE: DNA  
 52 <213> ORGANISM: Artificial Sequence  
 54 <220> FEATURE:  
 55 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic G-quartet  
 oligonucleotide  
 57 <220> FEATURE:  
 58 <221> NAME/KEY: misc\_feature  
 59 <222> LOCATION: 3, 4, 7, 8, 11, 12  
 60 <223> OTHER INFORMATION: n = a, t, g or c

*see p. 6*

62 <220> FEATURE:  
63 <221> NAME/KEY: misc\_feature

## RAW SEQUENCE LISTING

DATE: 11/13/2006

PATENT APPLICATION: US/10/543,033A

TIME: 11:01:47

Input Set : F:\Substitute seq listing 10589-012-999.txt

Output Set: N:\CRF4\11132006\J543033A.raw

```

64 <222> LOCATION: 3, 4, 7, 8, 11, 12
65 <223> OTHER INFORMATION: This represents one form of the sequence as described, other
forms
66     described have longer variable regions, typical is 2 - 10
67     nucleotides
69 <400> SEQUENCE: 2
W--> 70 ggnnggngngg nngg                                     14
73 <210> SEQ ID NO: 3
74 <211> LENGTH: 61
75 <212> TYPE: DNA
76 <213> ORGANISM: Artificial Sequence
78 <220> FEATURE:
79 <223> OTHER INFORMATION: Description of Artificial Sequence: Antisense minus uORF NcoI
primer
81 <400> SEQUENCE: 3
82 ggcccatgg ctccggtgg acccggtgg gaccggtg ggagggcgcg ggagggcgcg      60
84 g                                                                    61
87 <210> SEQ ID NO: 4
88 <211> LENGTH: 19
89 <212> TYPE: RNA
90 <213> ORGANISM: Oryctolagus cuniculus
92 <220> FEATURE:
93 <223> OTHER INFORMATION: subunit of 15-LOX-DICE
95 <400> SEQUENCE: 4
96 cccrccuc uucccaag                                             19
99 <210> SEQ ID NO: 5
100 <211> LENGTH: 152
101 <212> TYPE: DNA
102 <213> ORGANISM: Homo sapiens
104 <400> SEQUENCE: 5
105 gcagaggacc agctaagagg gagagaagca actacagacc cccctgaaa acaaccctca      60
107 gacgccacat cccctgacaa gctgccaggc aggttctctt cctctcacat actgaccac      120
109 ggctccacc tcttccctt ggaaaggaca cc                             152
112 <210> SEQ ID NO: 6
113 <211> LENGTH: 792
114 <212> TYPE: DNA
115 <213> ORGANISM: Homo sapiens
117 <400> SEQUENCE: 6
118 tgaggaggac gaacatccaa ccttcccaa cgctccctt gcccgaatcc ctttattacc      60
120 cctccttca gacaccctca acctctctg gtcaaaaag agaattgggg gcttaggggc      120
122 ggaaccaag cttagaactt taagcaacaa gaccaccact tcgaaacctg ggattcagga      180
124 atgtgtggcc tgcacagtga attgctggca accactaaga attcaaactg gggcctccag      240
126 aactcactgg ggctacagc tttgatccct gacatctgga atctggagac cagggagcct      300
128 ttggttctgg ccagaatgct gcaggacttg agaagacctc acctagaaat tgacacaagt      360
130 ggaccttagg ctttctctc tccagatgtt tccagacttc cttgagacac ggagcccagc      420
132 cctcccatg gagccagctc cctctattta tgtttgact tgtgattatt tattatttat      480
134 ttattattta tttatttaca gatgaatgta tttatttggg agaccgggg atcctggggg      540
136 acccaatgta ggagctgcct tggctcagac atgttttccg tgaaaacgga gctgaacaat      600
138 aggctgttcc catgtagccc cctggcctct gtgccttctt ttgattatgt tttttaaaat      660
140 atttatctga ttaagttgtc taaacaatgc tgatttggtg accaactgtc actcattgct      720
142 gagcctctgc tcccagggg agttgtgtct gtaatcgccc tactattcag tggcgagaaa      780

```

## RAW SEQUENCE LISTING

DATE: 11/13/2006

PATENT APPLICATION: US/10/543,033A

TIME: 11:01:47

Input Set : F:\Substitute seq listing 10589-012-999.txt

Output Set: N:\CRF4\11132006\J543033A.raw

```

144 taaagtttgc tt 792
147 <210> SEQ ID NO: 7
148 <211> LENGTH: 21
149 <212> TYPE: RNA
150 <213> ORGANISM: Homo sapiens
152 <220> FEATURE:
153 <223> OTHER INFORMATION: Group I AU-Rich element(ARE) cluster of 3'untranslated
region
155 <400> SEQUENCE: 7
156 auuuuuuuuu uuauuuuuuu a 21
159 <210> SEQ ID NO: 8
160 <211> LENGTH: 40
161 <212> TYPE: DNA
162 <213> ORGANISM: Homo sapiens
164 <400> SEQUENCE: 8
165 kctggaggat gtggctgcag agcctgctgc tcttgggcac 40
168 <210> SEQ ID NO: 9
169 <211> LENGTH: 289
170 <212> TYPE: DNA
171 <213> ORGANISM: Homo sapiens
173 <400> SEQUENCE: 9
174 gccgggggagc tgctctctca tgaacaaga gctagaaact caggatggtc atcttggagg 60
176 gaccaagggg tgggccacag ccatgggtgg agtggcctgg acctgccctg ggccacactg 120
178 accctgatac aggcattggc gaagaatggg aatattttat actgacagaa atcagtaata 180
180 tttatatatt tatattttta aaatatttat ttattttatt atttaagtgc atattccata 240
182 tttattcaag atgttttacc gtaataatta ttattaaaaa tatgcttct 289
185 <210> SEQ ID NO: 10
186 <211> LENGTH: 7008
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
190 <220> FEATURE:
191 <223> OTHER INFORMATION: Description of Artificial Sequence: Expression Vector pCMRI
193 <400> SEQUENCE: 10
194 gacggatcgg gagatctccc gatcccctat ggtgcactct cagtacaatc tgctctgatg 60
196 cgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg 120
198 cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc 180
200 ttagggttag gcgttttgcg ctgcttcgcg atgtacgggc cagatatacg cgttgacatt 240
202 gattattgac tagttattaa tagtaatcaa ttacgggggc attagttcat agcccatata 300
204 tggagtccg cgttacataa cttacggtaa atggcccgc tggctgaccg cccaacgacc 360
206 cccgcccatt gacgtcaata atgacgtatg ttcccatagt aacgccaata gggactttcc 420
208 attgacgtca atgggtggag tatttacggg aaactgccc cttggcagta catcaagtgt 480
210 atcatatgcc aagtacgccc cctattgacg tcaatgacgg taaatggccc gcctggcatt 540
212 atgcccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca 600
214 tcgctattac catggtgatg cggttttggc agtacatcaa tgggcgtgga tagcggtttg 660
216 actcacggg atttccaagt ctccacccca ttgacgtcaa tgggagtttg ttttggcacc 720
218 aaaatcaacg ggactttcca aaatgtcgta acaactccgc ccattgacg caaatggcg 780
220 gtaggcgtgt acgggtggag gtctatataa gcagagctct ctggctaact aagctttcgg 840
222 cgcgccgagg taccatggga tccgaagacg ccaaaaacat aaagaaaggc ccggcgccat 900
224 tctatcctct agaggatgga accgctggag agcaactgca taaggctatg aagagatacg 960
226 cctggttcc tggacaatt gcttttacag atgcacatat cgagggtgaac atcacgtacg 1020

```

## RAW SEQUENCE LISTING

DATE: 11/13/2006

PATENT APPLICATION: US/10/543,033A

TIME: 11:01:47

Input Set : F:\Substitute seq listing 10589-012-999.txt

Output Set: N:\CRF4\11132006\J543033A.raw

228	cggaatactt	cgaaatgtcc	gttcggttgg	cagaagctat	gaaacgatat	gggctgaata	1080
230	caaatacacag	aatcgtcgta	tgcagtga	actctcttca	attctttatg	ccggtgttgg	1140
232	gcgcgttatt	tatcgaggtt	gcagttgcgc	ccgcgaacga	catttataat	gaacgtgaat	1200
234	tgctcaacag	tatgaacatt	tcgcagccta	ccgtagtgtt	tgtttccaaa	aaggggttgc	1260
236	aaaaaatttt	gaacgtgcaa	aaaaaattac	caataatcca	gaaaattatt	atcatggatt	1320
238	ctaaaacgga	ttaccagga	tttcagtcga	tgtacacgtt	cgtcacatct	catctacctc	1380
240	ccggttttaa	tgaatacga	tttgtaccag	agtcctttga	tcgtgacaaa	acaattgcac	1440
242	tgataatgaa	ttcctctgga	tctactgggt	tacctaaggg	tgtggccctt	ccgcatagaa	1500
244	ctgcctgcgt	cagattctcg	catgccagag	atcctathtt	tggcaatcaa	atcattccgg	1560
246	atactgcgat	tttaagtgtt	gttccattcc	atcacggttt	tggaatgttt	actacactcg	1620
248	gatatttgat	atgtggattt	cgagtcgtct	taatgtatag	atttgaagaa	gagctgtttt	1680
250	tacgatecct	tcaggattac	aaaattcaaa	gtgcgttgct	agtaccaacc	ctattttcat	1740
252	tcttcgccaa	aagcactctg	attgacaaat	acgattttatc	taatttacac	gaaattgctt	1800
254	ctgggggcgc	acctctttcg	aaagaagtcg	gggaagcggg	tgcaaaacgc	ttccatcttc	1860
256	cagggatagc	acaaggatat	gggctcactg	agactacatc	agctattctg	attacaccgc	1920
258	aggggggatga	taaacggggc	gcggtcggta	aagttgttcc	attttttgaa	gcgaaggttg	1980
260	tggatctgga	taccgggaaa	acgctgggcg	ttaatcagag	aggcgaatta	tgtgtcagag	2040
262	gacctatgat	tatgtccggt	tatgtaaaca	atccggaagc	gaccaacgcc	ttgattgaca	2100
264	aggatggatg	gctacattct	ggagacatag	cttactggga	cgaagacgaa	cacttcttca	2160
266	tagttgaccg	cttgaagtct	ttaattaaat	acaaaggata	tcaggtggcc	cccgtgaat	2220
268	tggaatcgat	attgtttaca	caccccaaca	tcttcgacgc	gggcgtggca	ggtcttcccg	2280
270	acgatgacgc	cggatgaactt	ccgcgcgcgc	ttgttgtttt	ggagcacgga	aagacgatga	2340
272	cggaaaaaga	gatcgtggat	tacgtcgcca	gtcaagtaac	aaccgcgaaa	aagttgcgcg	2400
274	gaggagtgtg	gtttgtggac	gaagtaccga	aaggctcttac	cggaaaactc	gacgcaagaa	2460
276	aatcagaga	gatcctcata	aaggccaaga	agggcgga	gtccaaattg	cgcggccgct	2520
278	aactcgagaa	taaaatgagg	aaattgcatc	gcattgtctg	agtaggtgtc	attctattct	2580
280	gggggggtggg	gtggggcagg	acagcaaggg	ggaggattgg	gaagacaata	gcaggcatgc	2640
282	tgggggatgcg	gtgggctcta	tggcttctga	ggcggaagaa	accagctggg	gctctagggg	2700
284	gtatccccac	gcgccttgta	gcggcgcat	aagcgcggcg	ggtgtggtgg	ttacgcgcag	2760
286	cgtgaccgct	acatttgcca	gcgccttagc	gcccgtctct	ttcgttttct	tcccttccct	2820
288	tctcgccacg	ttcgccggct	ttccccgtca	agctctaaat	cgggggctcc	ctttagggtt	2880
290	ccgatttagt	gctttacggc	acctcgacct	caaaaaactt	gattagggtg	atggttcacg	2940
292	tagtggggcca	tgcgcctgat	agacggtttt	tgcgcctttg	acgttggagt	ccacgttctt	3000
294	taatagtggga	ctcttgttcc	aaactggaa	aacactcaac	cctatctcgg	tctattcttt	3060
296	tgattttataa	gggattttgc	cgatttcggc	ctatttggtta	aaaaatgagc	tgattttaaca	3120
298	aaaattttaac	gcgaattaat	tctgtggaat	gtgtgtcagt	taggggtgtg	aaagtcccca	3180
300	ggctccccag	caggcagaag	tatgcaaagc	atgcattctca	attagtcagc	aaccaggtgt	3240
302	ggaaagtccc	caggctcccc	agcaggcaga	agtatgcaaa	gcatgcattc	caattagtca	3300
304	gcaaccatag	ttccgcccct	aactccgccc	atcccgcctc	taactccgcc	cagttccgcc	3360
306	cattctccgc	cccatggctg	actaattttt	tttattttatg	cagaggccga	ggccgcctct	3420
308	gcctctgagc	tattccagaa	gtagtgagga	ggcttttttg	gaggcctagg	cttttgcaaa	3480
310	aagctcccgg	gagcttgtat	atccattttc	ggatctgatc	agcacgtgat	gaaaaagcct	3540
312	gaactcacgc	cgacgtctgt	cgagaagttt	ctgatcgaaa	agttcgacag	cgtctccgac	3600
314	ctgatgcagc	tctcgagggg	cgaagaatct	cgtgctttca	gcttcgatgt	aggagggcgt	3660
316	ggatatgtcc	tgccggtaaa	tagctgcgcc	gatggtttct	acaaagatcg	ttatgtttat	3720
318	cggcactttg	catcgccgcg	gctcccga	ccggaagtgc	ttgacattgg	ggaattcagc	3780
320	gagagcctga	cctattgcat	ctcccgcctg	gcacagggtg	tcacgttgca	agacctgcct	3840
322	gaaaccgaac	tgcccgcgtg	tctgcagccg	gtcgcggagg	ccatggatgc	gatcgtctgcg	3900
324	gccgatctta	gccagacgag	cgggttcggc	ccattcggac	cgcaaggaat	cggatcaatac	3960

## RAW SEQUENCE LISTING

DATE: 11/13/2006

PATENT APPLICATION: US/10/543,033A

TIME: 11:01:47

Input Set : F:\Substitute seq listing 10589-012-999.txt

Output Set: N:\CRF4\11132006\J543033A.raw

326	actacatggc	gtgatttcat	atgcgcgatt	gctgatcccc	atgtgtatca	ctggcaaact	4020
328	gtgatggacg	acaccgtcag	tgcgtccgtc	gcgcaggctc	tcgatgagct	gatgctttgg	4080
330	gccgaggact	gccccgaagt	ccggcacctc	gtgcacgcgg	atttcggctc	caacaatgtc	4140
332	ctgacggaca	atggccgcat	aacagcggtc	attgactgga	gcgaggcgat	gttcggggat	4200
334	tcccaatacg	aggtcgccaa	catcttcttc	tggaggccgt	ggttggcttg	tatggagcag	4260
336	cagacgcgct	acttcgagcg	gaggcatccg	gagcttgacg	gatcgccgcg	gctccgggcg	4320
338	tatatgtctc	gcattgggtc	tgaccaactc	tatcagagct	tggttgacgg	caatttcgat	4380
340	gatgcagctt	gggcgcaggg	tcgatgcgac	gcaatcgtcc	gatccggagc	cgggactgtc	4440
342	gggcgtacac	aaatcgcccc	cagaagcgcg	gccgtctgga	ccgatggctg	tgtagaagta	4500
344	ctcgccgata	gtggaaaccg	acgccccagc	actcgtccga	gggcaaagga	atagcacgtg	4560
346	ctacgagatt	tcgattccac	cgcgccttcc	tatgaaagg	tgggcttcgg	aatcgttttc	4620
348	cgggacgccc	gctggatgat	cctccagcgc	ggggatctca	tgctggagtt	cttcgcccac	4680
350	cccaacttgt	ttattgcagc	ttataatgg	tacaaataaa	gcaatagcat	cacaaatttc	4740
352	acaaataaag	catttttttc	actgcattct	agttgtgggt	tgtccaaact	catcaatgta	4800
354	tcttatcatg	tctgtatacc	gtcgacctct	agctagagct	tggcgtaatc	atggctatag	4860
356	ctgtttcctg	tgtgaaattg	ttatccgctc	acaattccac	acaacatacg	agccggaagc	4920
358	ataaagtgtg	aagcctgggg	tgcctaatag	gtgagctaac	tcacattaat	tgcgttgccg	4980
360	tcactgcccc	ctttccagtc	gggaaacctg	tcgtgccagc	tgcattaatg	aatcggccaa	5040
362	cgcgcgggga	gaggcggttt	gcgtattggg	cgcctctccg	cttcctcgct	caactgactc	5100
364	ctgcgctcgg	tcgttcggct	gcggcgagcg	gtatcagctc	actcaaaggc	ggtaatacgg	5160
366	ttatccacag	aatcagggga	taacgcagga	aagaacatgt	gagcaaaagg	ccagcaaaag	5220
368	gccaggaacc	gtaaaaaggc	cgcgttgctg	gcgtttttcc	ataggctccg	ccccctgac	5280
370	gagcatcaca	aaaatcgacg	ctcaagtcag	aggtggcgaa	acccgacagg	actataaaga	5340
372	taccaggcgt	ttccccctgg	aagctccctc	gtgcgctctc	ctgttccgac	cctgccgctt	5400
374	accggatacc	tgtccgcctt	tctcccttcg	ggaagcgtgg	cgttttctca	tagctcacgc	5460
376	tgtaggatct	tcagttcggt	gtaggctcgt	cgcctcaagc	tgggctgtgt	gcacgaaccc	5520
378	cccgttcagc	ccgaccgctg	cgccttatcc	ggtaactatc	gtcttgagtc	caacccggtg	5580
380	agacacgact	tatcgccact	ggcagcagcc	actggttaaca	ggattagcag	agcgaggat	5640
382	gtaggcggtg	ctacagagtt	cttgaagtgg	tggcctaact	acggctacac	tagaagaaca	5700
384	gtatttggtg	tctgcgctct	gctgaagcca	gttaccttcg	gaaaaagagt	tggtagctct	5760
386	tgatccggca	aacaaaccac	cgcgtggtagc	ggtttttttg	tttgcaagca	gcagattacg	5820
388	cgcagaaaaa	aaggatctca	agaagatcct	ttgatctttt	ctacgggggtc	tgacgctcag	5880
390	tggaaacgaa	actcacgtta	agggatcttg	gtcatgagat	tatcaaaaag	gatcttcacc	5940
392	tggatccttt	taaattaaaa	atgaagtgtt	aaatcaatct	aaagtatata	tgagtaaact	6000
394	tggctctgaca	gttaccaatg	cttaatcagt	gaggcaccta	tctcagcgat	ctgtctattt	6060
396	cgttcaccca	tagttgcctg	actccccgtc	gtgtagataa	ctacgatacg	ggagggttta	6120
398	ccatctggcc	ccagtgcctg	aatgataccg	cgagacccac	gctcaccggc	tccagattta	6180
400	tcagcaataa	accagccagc	cgggaaggcc	gagcgcagaa	gtggctctgc	aactttatcc	6240
402	gcctccatcc	agtctattaa	ttgttgccgg	gaagctagag	taagtagttc	gccagttaat	6300
404	agtttgcgca	acgttggtgc	cattgctaca	ggcatcgtgg	tgtcacgctc	gtcgtttggt	6360
406	atggcttcat	tcagctccgg	ttcccaacga	tcaaggcgag	ttacatgatc	ccccatgttg	6420
408	tgcaaaaaag	cggttagctc	cttcggtcct	ccgatcgttg	tcagaagtaa	gttggccgca	6480
410	gtgttatcac	tcattggtat	ggcagcactg	cataattctc	ttactgtcat	gccatccgta	6540
412	agatgctttt	ctgtgactgg	tgagtactca	accaagtcac	tctgagaata	gtgtatgcgg	6600
414	cgaccgagtt	gctcttgccc	ggcgtcaata	cgggataata	ccgcgccaca	tagcagaact	6660
416	ttaaaagtgc	tcattcattg	aaaacgttct	tcggggcgaa	aactctcaag	gatcttaccg	6720
418	ctgttgagat	ccagttcgat	gtaaccctac	cgtgcaccca	actgatcttc	agcatctttt	6780
420	actttcacca	gcgtttctgg	gtgagcaaaa	acaggaaggc	aaaatgccgc	aaaaaaggga	6840
422	ataagggcga	cacggaaatg	ttgaatactc	atactcttcc	tttttcaata	ttattgaagc	6900

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/543,033A

DATE: 11/13/2006  
TIME: 11:01:48

Input Set : F:\Substitute seq listing 10589-012-999.txt  
Output Set: N:\CRF4\11132006\J543033A.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 3,7,8,11  
Seq#:2; N Pos. 3,4,7,8,11,12  
Seq#:13; N Pos. 1,15  
Seq#:33; N Pos. 409,444  
Seq#:40; N Pos. 535,734

**Invalid Line Length:**

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:2; Line(s) 55



## VERIFICATION SUMMARY

DATE: 11/13/2006

PATENT APPLICATION: US/10/543,033A

TIME: 11:01:48

Input Set : F:\Substitute seq listing 10589-012-999.txt

Output Set: N:\CRF4\11132006\J543033A.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:46 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:70 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
L:472 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0  
L:1830 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:360  
M:341 Repeated in SeqNo=33  
L:2041 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:480  
M:341 Repeated in SeqNo=40